Chapter 1

Table of Contents

Overview

Project Cost Accounting Subsystem

About this Chapter	3
Introduction	5
PCAS Terminology	6
Project	6
Customers	7
Customer Agreement	7
Budget Fiscal Year Project/Customer/Agreement Table (FPCA)	8
Steps in the Project Cost Accounting Process	10
Establishing Projects	12
Setting Up Installation-Wide Projects	12
Entering Projects on the PROJ Table	13
Establishing Subprojects	14
Entering Information on the Subproject Table (SPRJ)	16
Customer Agreements	16
Entering Customer Information	17
Entering Billing Information	18
Internal Billing Options	20
Entering Accounting Information	21

Linking Projects to Customer Agreements on the FPCA Table	21
Budget Fiscal Year and Appropriation	22
Maximum Billable Amount	22
Estimated Burden Amount	23
Indirect Cost Transfers	24
Default FPCA Entry	24
FPCA Table Updates	25
Collecting Project Costs	27
Accounting Based Costs	27
Non-Accounting Based Costs	28
Spending Controls	28
Distributing Project Costs to Customers	29
Project-to-Customer Distribution Example	30
Step 1: Collecting Costs	33
Step 2: Distributing Costs	34
Enforcing FPCA Funding Limits	34
Step 3: Enforcing Customer Agreement Funding Limits	34
Step 4: Posting Amounts for Customer Agreements and Projects	36
Transferring Indirect Costs	37
Billing Customers	37
Recording Cash Advances	39
Clearing Customer Agreement Lines	39
Clearing Projects	40
Summary	41

Chapter 1 Page 2 9/00

Overview

Project Cost Accounting Subsystem

About this Chapter . . .

This chapter introduces the basic terms and ideas that are discussed throughout the IFMS Project Cost Accounting Subsystem section. Each step in the Project Cost Accounting (PCAS) process is described. This section covers:

- # Introduction to the IFMS Project Cost Accounting Subsystem
- # Establishing Projects
- # Entering Customer Agreements
- # Linking Projects to Customer Agreements
- # Collecting Project Costs
- # Distributing Project Costs
- **#** Transferring Indirect Costs
- **#** Billing Customers
- # Recording Cash Advances
- # Transferring Costs
- # Clearing Customer Agreements and Projects

This documentation is current as of the 5.1E7 subrelease.

Introduction

IFMS is divided into multiple subsystems. The Project Cost Accounting Subsystem is one of these. This volume of the *IFMS Users Guide* provides information on the Project Cost Accounting Subsystem. It covers the online establishment of projects and customer agreements, and the offline distribution and billing of costs to customers. The Billing Document (BD) and Internal Voucher (IV) transactions created as a result of the billing process are not part of the IFMS Project Cost Accounting Subsystem. BD transactions are contained in the Accounts Receivable Subsystem of the *IFMS User's Guide* and IV transactions are recorded in the Accounts Payable Subsystem of the *IFMS User's Guide*.

In this volume of the *IFMS User's Guide*, we will explain and describe the flow of information through the IFMS Project Cost Accounting Subsystem, the processing of transactions, how this information relates to the rest of IFMS through tables, provide a thorough data entry tutorial for system users, and finally describe the available reports for this subsystem. In addition, we have included an appendix containing: (a) Glossary of Terms and (b) Acronym Conversion Chart.

Chapter 1 Page 4 9/00

PCAS Terminology

Before discussing how to use the Project Cost Accounting subsystem, it may be helpful to define a few key terms. Then, we will briefly define the steps that you need to perform to use the Project Cost Accounting Subsystem.

Project

A **project** is an entity that collects costs for items or services that EPA provides to customers. Projects are divided into subprojects, which collect spending information about the costs collected for a project. IFMS collects this spending information when you reference a subproject in a spending transaction or when you enter a Project Charge Document (CH). These costs are then "rolled up" to the project.

Because subprojects, and not projects, directly capture costs entered in spending transactions, each project must include at least one subproject. The diagram below (Exhibit 1) shows the interaction between projects, subprojects, and spending transactions.

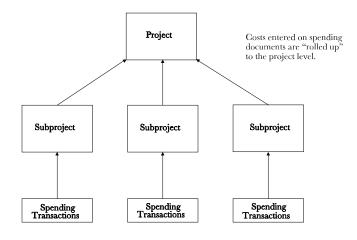


Exhibit 1

Customers

Customers are any vendors, offices within your agency, or other agencies, that provide funding for a project. In IFMS, there are two types of customers that fund projects: direct customers and billable customers.

A **direct customer** funds a project directly through an appropriation. Usually, your agency acts as a direct customer, since project costs are transferred directly out of your appropriation.

A **billable customer** provides funding for a project through the payment of bills or the application of advances. Based on whether or not a customer uses IFMS, billable customers are either internal reimbursable customers or external reimbursable customers.

Internal reimbursable customers are customers within your agency that use IFMS, whereas **external reimbursable customers** are customers that are not part of your IFMS installation.

Valid types of customers are defined in the Customer Type Table (CTYP) and valid customers are defined in the Vendor Table (VEND).

The amount of funding that a customer agrees to provide for a project is established by entering a **customer agreement**. Customers can provide funding through direct appropriations, advances, or by reimbursing your agency for expenses incurred.

? Note

You can establish funding directly in the Budget Fiscal Year Project/Customer/Agreement Table (FPCA) if the Direct RA Allowed Indicator in the Project Options - Fund Table (PFND) is **Y** or **N**.

Chapter 1 Page 6 9/00

The Budget Fiscal Year Project/ Customer/ Agreement Table (FPCA)

The Budget Fiscal Year Project/Customer/Agreement Table (FPCA) is used to associate projects with customers. Before you enter information into the FPCA table, projects and customer agreements must exist independently of each other. The diagram that follows (Exhibit 2) shows the three different ways that you can associate projects and customers by creating entries in the FPCA table. Currently, EPA uses the second and third model shown in Exhibit 2.

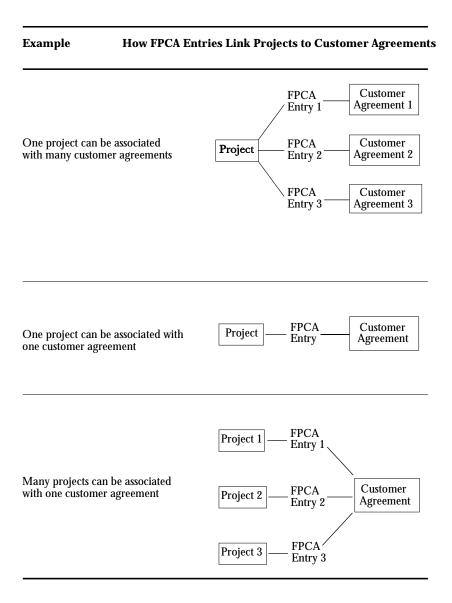


Exhibit 2

Once you associate projects with customers in the FPCA table, you can distribute project costs from projects to customers, and create bills for project costs by running various offline processes.

Chapter 1 Page 8 9/00

Steps in the Project Cost Accounting Process

The chart on the following page shows the individual steps that you need to perform in order to use the Project Cost Accounting subsystem.

For ease of understanding, the chart depicts the Project Cost Accounting subsystem as following a series of steps in a particular order; however, many of the steps are independent of each other and can be performed in any order. For instance, because setting up projects and entering customer agreements are independent of each other, you can enter customer agreements before setting up projects.

In addition, if you are using projects only to track costs (you are not distributing costs to customers) you will skip all of the steps dealing with customers and customer agreements.

? Note

The FPRJ Spending Ctl Ind must be **I** if you are using projects only to track costs.

Step	What To Do at Each Step
Configure the PCAS subsystem	Establish the coding structure for projects and subprojects using the Project Options Table (PRJO) and the Project Options - Fund Table (PFND).
	Define the status of projects in the Project Status Table (PSTA).
	Establish reporting hierarchies in the Project Type Table (PJTY), Project Category Table (PJCA), Project Class Table (PJCL) and the Project Group Table (PJGR).
	Define customer type categories in the Customer Type category Table (CTYC). Then, define customer types in the Customer Type Table (CTYP).
Establish Projects	For each project you want to establish, enter project-related data into the Installation-Wide Project Table (IWPT), the Project Table (PROJ), and the Subproject Table (SPRJ).
Enter Customer Agreements	As customers plan or authorize agreements on how they wish to fund a project, enter information about the agreement in the Customer Agreement Estimate Setup Document (ER) and/or the Customer Agreement Setup Document (RA).
	In addition, for internal customers, establish the accounting distribution that funds should be transferred within the Customer Accounting Distribution Table (CADT).
Link Projects to Customer Agreements	Define the relationship between projects and customer agreements and define the valid funding sources for a project by entering information in the Budget Fiscal Year Project/Customer/Agreement Table (FPCA).
	If the customer is internal and the Internal Billing Option is S , additional entries must be made on the Budget Fiscal Year
Collect Project Costs	Collect costs for a project by entering spending documents that reference a subproject or by entering Project Charge Documents (CH).
Distribute Project Costs to Customers	Run the Project-to-Customer Distribution Offline process to distribute costs from projects to customer agreements.
Transfer Indirect Costs	Run the Indirect Cost Transfer offline process to transfer indirect costs, usually overhead costs, to different projects and customer agreements.
Bill Customers	Run the offline Billing Process to create customer billing and collection documents.

The remainder of this chapter describes in detail each step in the Project Cost Accounting process.

Chapter 1 Page 10 9/00

Establishing Projects

As previously mentioned, a project is an entity that collects costs and an entity from which costs are distributed to customers. For example, a project could be a service that your agency supplies to customers, such as consulting to private organizations on how to perform a specific task, or an item, such as a building that your agency is constructing. EPA groups their internal services under two main projects: the Enterprise Technology Services Division (ETSD) and Postage. Some of the services that fall under the ETSD project are mainframe services, desktop computing, technical support and consulting services. A project is generally anything that your agency wants to track and/or distribute costs for.

To collect more information about a project or projects, you can group multiple projects into an installation-wide project. Installation-wide projects are described below.

Setting up Installation-Wide Projects

An **installation-wide project** is an umbrella project that you can use to group multiple projects together for reporting and online inquiry purposes. The use of installation-wide projects is optional in IFMS.

To establish an installation-wide project, enter a unique installation-wide project number in the Installation-Wide Project Table (IWPT). As you enter each project on the Project Table (PROJ), you can specify the installation wide project to which the project belongs.

Entering Projects on the PROJ Table

Projects are established in PROJ table. The PROJ table is used to store project information, and maintain a current status of all project costs. In addition, the PROJ table contains options to limit the amount of funds your agency can spend on a particular project.

To establish a project, you must enter the following information in the PROJ table:

The accounting codes that define the project number (i.e., Budget Fiscal Year, Appropriation, RPIO, Organization, Program Element, Reporting Category, and Site/Project Number). The project number is used to identify the project to IFMS. These codes are specified in the Project Options Table (PRJO) or the Project Options - Fund Table (PFND).

The project number must contain at least the Site/Project Number, but the Site/Project Number can be set to spaces (see the Project table). Note that if the field is set to spaces, the Project Cost common routine will use spaces when accessing the project entry.

- # The status of the project. To post spending transactions to this project, the status must be open.
- # The last date that spending transactions can be posted to this project.
- # The maximum amount that can be spent on this project.
- # Any spending control options. These options enforce spending limits so that the project does not overspend its maximum amount. For more information, see the Spending Controls section.
- # An installation-wide project number (if you want the project to belong to an installation-wide project).
 - In addition, you can specify if you want the project to belong to other groups, such as project class, project category, project type, or project group. These groups are used for reporting purposes only.
- # Whether you want to create subprojects or permit IFMS to create a subproject (see the next section for more information).

Establishing Subprojects

Subprojects are subdivisions of a project. For example, under the project of mainframe services, subprojects could be online

Chapter 1 Page 12 9/00

processing, offline processing, and maintenance. Although multiple subprojects can be set up for one project, EPA's current structure utilizes a one-to-one relationship. Therefore, there is typically only one subproject established for each project.

In addition to allowing you to collect more detailed information about a project, the major function of a subproject is to collect costs for a project. Costs are collected at the subproject level by referencing a subproject in a spending transactions or by entering a Project Charge (CH) transaction. When you reference a subproject in a spending transaction, IFMS applies the cost in the spending transaction to the subproject.

Because IFMS collects costs at the subproject level and then "rolls up" the costs to the project level, all projects must contain at least one subproject. You have the option of creating your own subprojects, using a SPRJ Allowed indicator of **Y** on the PROJ table. If you do not wish to create a subproject, IFMS will automatically create a subproject with the same dimensions as the project number when the SPRJ Allowed indicator on the PROJ table is **N**. Below are three examples of how projects and subprojects correspond to each other (Exhibit 3).

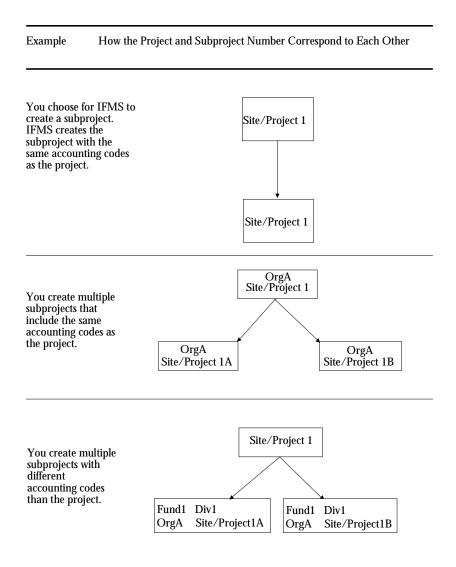


Exhibit 3

Chapter 1 Page 14 9/00

Entering Information in the Subproject Table (SPRJ)

To define subprojects in IFMS, you must enter information in the Subproject Table (SPRJ). In addition to defining subprojects, this table is used to link spending at the subproject level to the amount of funds available for spending at the project level.

The following information must be entered in the SPRJ table:

The accounting codes (i.e., Budget Fiscal Year, Appropriation, RPIO, Organization, Program Element, Reporting Category, and Site/Project Number) that define the subproject number. The subproject number is used to identify the subproject in IFMS.

The subproject number must contain at least the accounting codes of its project; however, the subproject number can contain additional codes that are not part of the project number. The dimensions that you can choose from to create the subproject number are defined in the Project Options Table (PRJO) or the Project Options - Fund Table (PFND).

- # The status of the subproject. To post spending transactions to the subproject, the status must be open.
- # The Site/Project number of the project to which the subproject belongs. The project level job code in the SPRJ table links the project to the subproject, so that costs from spending transactions that reference the subproject can be "rolled up" to the project level.

Customer Agreements

A customer agreement provides funding for your agency to provide a certain item or service. In IFMS, customer agreements are used to fund projects. Note that a customer agreement can fund one project, or a customer agreement can fund multiple, perhaps unrelated, projects.

Example

Suppose your agency is building a library devoted to books in the field of botany and a botanical garden. In IFMS, the library and the garden are defined as separate projects.

The Botanical Society of America wishes to fund, in part, both projects. The Society can specify the amount of funding for both projects in one customer agreement.

You enter information relating to an agreement in the Customer Agreement Estimate Setup Document (ER) or the Customer Agreement Setup Document (RA). The ER transaction is used to enter information in the early stages of an agreement (e.g., paperwork is not yet completed for the agreement). You enter a RA transaction when the agreement is finalized by your agency and the customer.

Entering Customer Information

As we mentioned previously, there are two kinds of customers, billable customers and direct customers. **Billable customers** are customers that fund a project through advances or reimbursements.

Direct customers are customers that fund a project directly through an appropriation (e.g., your agency). Depending on the value of the Direct RA Allowed Indicator in the Project Options - Fund Table (PFND), you may not be required to enter Customer Agreement Setup Documents (ERs and RAs) for direct customers.

Chapter 1 Page 16 9/00

For both types of customers, you enter the following customer information in the ER and RA transactions:

- # The customer number. The customer number must be a valid vendor in the Vendor Table (VEND)
- # The customer agreement number. IFMS uses this number when billing customers.
- # The type of customer. Direct and billable customers are established on the Customer Type Table (CTYP).

Entering Billing Information

In addition to entering customer information, for billable customers, you must enter information about:

- # The type of bill that IFMS should generate (e.g., internal, external).
- # How often customers should be billed (e.g., monthly, bi-monthly).
- # The first and last date that IFMS should generate bills for this customer agreement.

Exhibit 4 summarizes the types of bills that IFMS can generate and in which cases a particular bill type should be used.

Type of Bill	Description
External Bill	For bills to customers outside of the federal government.
1080 Bill	For customers in the federal government that do not participate in direct funds transfer. Customers must have a vendor code of G in the Vendor Table (VEND) to use the 1080 bill.
Internal Bill	For customers inside EPA. IFMS creates Internal Voucher Transactions (IV) to perform the billing, usually an internal cost transfer.
1081 Bill	For customers in the federal government that participate in direct funds transfer. Customers must have a vendor code of G in the Vendor Table (VEND) to use the 1081 bill.
Manual Bill	For customers that fund a project through advances. IFMS creates Standard Voucher Transactions (SV) to liquidate the advance.
No Bill	Used to specify that the customer should not be billed. IFMS will not create any bills for this customer agreement.
OPACBIII	For customers in the federal government that participate in direct fund transfers. Customers must have a vendor code of G in the Vendor Table (VEND) to use the OPAC bill.

Exhibit 4

Chapter 1 Page 18 9/00

Internal Billing Options

When billing internal customers for project costs, IFMS can distribute costs directly to an internal customer's accounting distribution. The customer's internal accounting distribution is specified in the Customer Accounting Distribution Table (CADT). There are three different methods by which you can control how IFMS distributes costs accumulated in the Customer Agreement Line Table (CALT) to the internal customer's accounting distribution.

The first method is to allocate the costs to the customer distribution lines based on the order in which the lines appear in CADT. If more than one funding year appears in this table, using this method, you can control how new charges are applied to the lines (e.g., use old year funds first), by controlling the order in which the accounting distribution lines appear in CADT.

To allocate costs based on the order in which lines appear in CADT, enter **L** in the Internal Billing Option field in the Customer Agreement Estimate Setup Document (ER), or the Customer Agreement Setup Document (RA).

The second method is to prorate the amount of each line in the CALT table across all internal accounting distribution lines in the CADT table based on the relative maximum amount of each accounting distribution line. This method permits you to split the costs across all accounting distributions in the CADT table for any given customer agreement.

To prorate costs across all accounting distribution lines, enter **P** in the Internal Billing Option field in the ER or RA transaction.

The third method is to specify the CADT line or lines to be used to allocate costs for a particular project. This method enables you to specify the percentage distribution desired between the customer's CADT accounting lines for each project.

To charge costs to specific accounting distribution lines, enter **S** in the Internal Billing Option field in the ER or RA transaction.

? Note

The user must then establish entries in the Budget Fiscal Year Project/Customer/Agreement Detail Table (FPCD) in order for the project to customer distribution process to allocate costs to the CALT lines.

Entering Accounting Information

Accounting information must be entered on the RA or ER transaction for the fund to be reimbursed. Accounting postings are made based on which fields are populated in the accounting strip. Different postings are made depending on if a BOC is entered, a Revenue Source is entered, or if neither are entered.

Linking Projects to Customer Agreements on the FPCA Table

Projects and customer agreements exist independently of each other until you define the relationship between them in the Budget Fiscal Year Project/Customer/Agreement Table (FPCA).

You must enter the following in the FPCA table:

- # Information about the project and the customer agreement, such as the project number, the customer number, and the customer agreement number.
- # Information relating to the funding of the project.

Five types of funding information are recorded in the FPCA table: the Budget Fiscal Year and Appropriation, the Maximum Billable Amount, the Estimated Burden Amount, Indirect Cost Transfers, and the Default FPCA entry. Each type of funding information is discussed below.

Budget Fiscal Year and Appropriation

Chapter 1 Page 20 9/00

The **Budget Fiscal Year and Appropriation** determine which budget should be reimbursed with funds from customers. This, in turn, determines which budget you should enter in all spending transactions for this project.

Maximum Billable Amount

The **Maximum Billable Amount** is the amount of funds that the customer has agreed to provide for the project (i.e., the portion of the agreement linked to the project). The Maximum Billable Amounts entered for all customer agreements linked to a single project are used in conjunction with the estimated burden amount to determine the percentage of costs allocated to each customer agreement.

Example

A customer agrees to provide funding for two projects: \$100,000 in funding for mainframe services, and \$10,000 in funding for consulting services. In the Customer Agreement Setup Document (RA) you specify the total amount of funding for both projects, in this case, \$110,000.

When you enter information in the FPCA table for a particular project, the amount in the related RA transaction that applies to this project is entered in the Maximum Billable Amount field. For instance, when you enter information in the FPCA table for the mainframe project, you should enter \$100,000 in the Maximum Billable Amount field.

For billable customers, IFMS checks that the Maximum Billable Amount does not exceed the total amount available specified in the Customer Agreement Header Table (CAHT) and the Customer Agreement Line Table (CALT).

For direct customers, if the Direct Funding Control option in the Project Options Table (PRJO) is **Y**, IFMS checks that the Maximum Billable Amount does not exceed the total appropriation amount.

Estimated Burden Amount

A **burden amount** is a surcharge to a project. This surcharge is used to recover indirect project costs.

Example

Your agency has consolidated postal operations. Customers reimburse your agency for direct costs (e.g., cost of stamps) related to this project. However, there are also many indirect costs for this project, such as the cost of the administrative staff working on the project.

In order to be compensated for indirect costs, your agency assigns a burden amount to this project.

In the FPCA table, the Estimated Burden Amount is the burden amount that is associated with this project and customer agreement. In addition, IFMS uses the Estimated Burden Amount in the following equation when determining the available amount for project spending.

 $Amt\,Available = Project\,Maximum\,Amt\,-\,Estimated\,Burden\,Amt\\ for\,Project$

If you do not enter a specific burden amount, IFMS calculates the estimated burden amount using the following equation:

Estimated Burden = Maximum Billable - <u>Maximum Billable Amount</u>
Amount Amount 1 + Default Burden Rate

? Note

Because direct customers are a part of your agency, a burden amount is never applied to direct customers.

Chapter 1 Page 22 9/00

Indirect Cost Transfers

Indirect Costs are costs or surcharges that occurred in another project or accounting distribution. To distribute indirect costs to a different customer or project, you can run the Indirect Cost Transfer process.

To specify that costs can be transferred for this FPCA entry, enter **F** (for transfers to the accounting distribution in this entry) or **D** (for transfers to a default accounting distribution in the Project Options Table (PRJO)) in the Indirect Cost Transfer Option field in the FPCA table.

Default FPCA Entry

During the Project-to-Customer Distribution process, IFMS distributes project costs to customers based on the relative share of funding that each customer provides to fund the project. At times, however, project costs may exceed customer funding limits. If one exists, IFMS places all costs that exceed funding limits in a Default FPCA entry.

You specify a Default FPCA entry by entering a **Y** in the Distribution Default Customer Agreement field in the FPCA table. Only direct customer agreements may be used as Default FPCA entries.

FPCA Table Updates

In addition to linking projects to customer agreements, the Budget Fiscal Year Project/Customer/Agreement Table (FPCA) creates and modifies information relating to customers and projects. Once you enter information into the FPCA table, updates are made to the tables listed in Exhibit 5.

Table	How FPCA Updates the Table
Project/Customer/Agreement Table (PCUS)	FPCA updates this table with customers that fund a specific project.
Customer/Agreement/Project Table (CAPT)	FPCA updates this table with projects associated with a specific customer agreement.
Budget Fiscal Year Project Table (FPRJ)	Each FPCA entry creates an entry in this table.
Customer Agreement Header Table (CAHT) and the Customer Agreement Line Table (CALT)	FPCA creates an entry in this table when an FPCA entry is established for a direct customer when no Customer Agreement document was entered for this customer. For a billable customer, an FPCA entry updates the Project Amount on this table.
Appropriation Table (APPR) and the Fiscal Year Appropriation Table (FAPR)	For FPCA entries relating to direct customers, adds the Direct Project Amount on APPR and FAPR to the Maximum Amount minus the Estimated Burden Amount.
Project Table (PROJ) and the Installation-Wide Project Table (IWPT)	For FPCA entries related to direct customers, FPCA adds the Direct Amount on PROJ and IWPT to the Maximum Amount minus the Estimated Burden Amount.
	For FPCA entries relating to billable customers, FPCA updates the Estimated Billable Amount, the Agreement Billable Amount, and the Estimated Burden Amount.

Exhibit 5

Chapter 1 Page 24 9/00

Linking Projects to Customer Agreements on the FPCD Table

To allocate project costs to a specific line or lines on the Customer Accounting Distribution Table (CADT), you add entries to the Budget Fiscal Year Project/Customer/Agreement Detail Table (FPCD). The FPCD table provides a direct link between the FPCA table and a specific line on the CADT table.

Information that you enter in the FPCD table is similar to that which you entered in the FPCA table. You enter the FPCA project number (including Budget Fiscal Year, Appropriation, and Site/Project number) and customer agreement number information in the FPCD table. You must enter a CADT line number in the FPCD table in order to link the FPCD record to a specific line in the CADT table. The Maximum Billable Amount is used to determine the percentage of FPCA costs that will be allocated to each FPCD record (i.e., each specific CADT line).

Example

In the previous example, mainframe services was funded at \$100,000. Additionally, the customer designates three separate accounting lines on the CADT table to fund mainframe services. The designated split across the three accounting lines is 65%, 25%, and 10%. On the FPCD table, you specify the customer's split using the Maximum Billable Amount field, and you reference the appropriate customer accounting line by entering the corresponding CADT line. In this example, you setup three FPCD records with Maximum Billable Amounts of \$65,000, \$25,000, and \$10,000, respectively.

In order to link a project and customer agreement using the FPCD table, the following transaction and table entries must exist:

- # A Customer Agreement Set-Up Transaction (RA) with an Internal Billing Option of **S**.
- # FPCA table entries which link projects to customers.
- # CADT table entries which specify customer funding information.

Collecting Project Costs

Once you establish your project, you can begin collecting costs for a project. There are two ways to record costs against a project.

For accounting-based costs, you reference a subproject number in a spending transaction. This will result in posting a direct cost to a project.

For all non-accounting based costs, you enter a Project Charge Document (CH) to record a charge or cost to a project that does not represent an accounting event. An example of a non-accounting based cost is a charge for computer time.

Both ways of recording project costs are discussed below.

Accounting Based Costs

You apply accounting-based costs against a project by entering the site/project number (which, along with other data elements, points to a subproject) in IFMS transactions.

When entering spending transactions that specify a site/project number, all IFMS processing controls and checks that normally apply when processing transactions (such as budgetary spending controls) remain in effect. In addition to normal processing controls, IFMS checks that:

- # The site/project number (along with other data elements) corresponds to a valid subproject in the Subproject Table (SPRJ).
- # The project and subproject status codes indicate that the project and subproject are open.
- # The date of the transaction is between the project start and end dates.
- # The spending transaction does not exceed the amount of funds available for this project and/or subproject, customer, or FPCA entry (see the discussion of spending controls below).

Chapter 1 Page 26 9/00

Non-Accounting Based Costs

Project Charge (CH) transactions can be used to record accounting or non-accounting charges. To enter a CH transaction, enter the subproject number, the units charged, and the amount charged.

Spending Controls

Depending on your project options, when you enter a spending transaction, IFMS checks that the transaction does not exceed the amount of available funds at the project, subproject, customer, and FPCA levels.

You specify spending controls in the Project Table (PROJ) and the Subproject Table (SPRJ). The controls defined in the PROJ table are as follows:

- # The Max Proj FC Indicator is used to verify if all spending transactions referencing a project fall within the Project Maximum Amount on PROJ.
- # The Customer Funding FC Indicator is used to verify if all spending transactions fall within the total amount of customer funding (both direct and reimbursable for this project) on the Customer Agreement Line Table (CALT).
- # The FPRJ Spending Ctl Indicator is used to verify if the budget line referenced on the spending transaction exists, and if there are available funds in that budget to process the spending transaction. If customer agreements will not be linked to this project, enter an **I** (for ignore) in this field.

In the SPRJ table, the Funds Control Indicator verifies if a spending transaction referencing a subproject is within the Subproject Maximum Amount.

For more detailed information about spending controls, see the Project Cost Accounting tables and the IFMS System Setup Guide.

Distributing Project Costs to Customers

When you enter a spending transaction, the transaction only specifies which project IFMS should post the cost to; the transaction does not specify the customer to which the costs apply. The Project-to-Customer Distribution process distributes costs from a project to a customer. This process distributes direct project costs to customers based on the relative share of funding that the customer specified.

Note that the Project-to-Customer Distribution process is retroactive, that is, the process redistributes all costs each time that you run the process.

The following examples show the effects of the Project-to-Customer Distribution process.

Project-to-Customer Distribution Example

Suppose you have four customers funding a project. The project collects costs totaling \$100,000 during the first month. The maximum amount of funding that each customer agrees to provide and the percent share of funding that each customer is providing for the first month is shown in Exhibit 6:

Chapter 1 Page 28 9/00

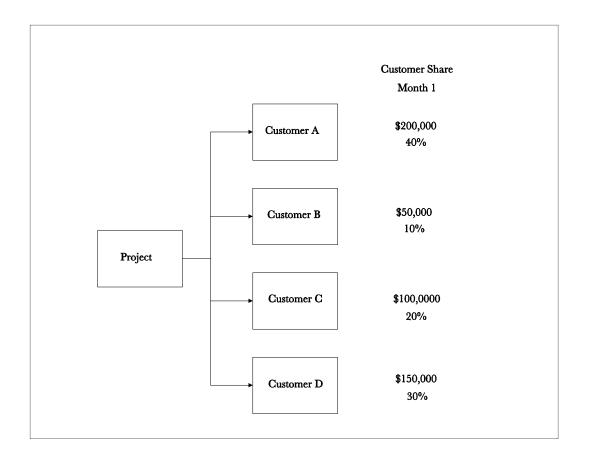


Exhibit 6

The Project-to-Customer Distribution process distributes the costs using the following calculations:

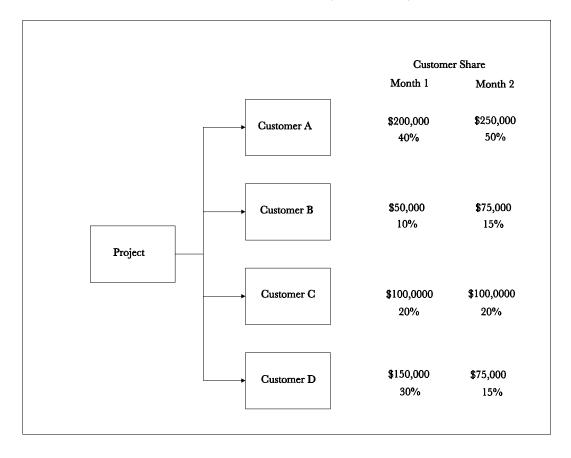
 $\label{eq:Customer's Percent of Funding} \begin{cal}Customer's Percent of Funding = \underline{Customer's Maximum Funding Amount}\\ Total Funding for the Project\\ \end{cases}$

Amount Distributed to Customer = (Customer's Percent of Funding)(Costs to Date)

In this example, the project costs are distributed as follows:

CustomerA	40% of \$100,000 or \$40,000
CustomerB	10% of \$100,000 or \$10,000
CustomerC	20% of \$100,000 or \$20,000
Customer D	30% of \$100,000 or \$30,000

During the second month, the project collects an additional \$50,000 in expenditures (\$150,000 in expenditures to date). However, due to budget constraints, Customer D decreased its maximum funding amount from \$150,000 to \$75,000. In order to provide the total funding amount for the project, Customer A increased its funding from \$200,000 to \$250,000, and Customer B increased its funding from \$50,000 to \$75,000 (see Exhibit 7).



Chapter 1 Page 30 9/00

Exhibit 7

Because the Project-to-Customer Distribution process distributes costs retroactively, the costs are distributed as follows:

Customer A	50% of \$150,000 or \$75,000
Customer B	15% of \$150,000 or \$22,500
Customer C	20% of \$150,000 or \$30,000
Customer D	30% of \$150,000 or \$22,500

Note that because costs were distributed retroactively, Customer D owed \$7,500 less after the second month than the first month.

? Note

The Project-to-Customer Distribution process bypasses any project costs that are only used for expenditure tracking (i.e., the FPRJ Funds Control flag in the Project Table (PROJ) is set to **I** for ignore).

The remainder of this section describes in greater detail the specific steps in the Project-to-Customer Distribution process. These steps are:

- 1. Collecting costs that are to be allocated to customers
- 2. Distributing costs
- 3. Enforcing customer agreement funding limits
- 4. Posting amounts for project costs and customer agreements

Step 1: Collecting Costs

IFMS creates a file that contains all undistributed project costs from the project cost journal. At this time, IFMS also checks that for each cost, the related project and its Budget Fiscal Year Project Table (FPRJ) entry are valid. This validation includes checking that:

- # The related Project Cost Accounting table entries exist.
- # The accounting fields that comprise the project number are correct.

FPCA% =
Maximum Project Amount From the FPCA entry - Estimated Burden Amount From the FPCA entry

Direct Amount funded for the Project from the FPRJ entry

Actual Billable Amount for the Project from the FPRJ entry

Step 2: Distributing Costs

IFMS distributes costs to each Budget Fiscal Year Project/Customer/Agreement Table (FPCA) entry according to the customer's share of funding. The following equation describes how IFMS calculates the amount distributed to each FPCA entry:

Step 3: Enforcing Customer Agreement Funding Limits

Chapter 1 Page 32 9/00

IFMS enforces FPCA funding limits for any FPCA entry associated with a Limit CALT/FPCA Indicator of **F**. For all FPCA entries with funding limits, IFMS will remove any costs in excess of the Maximum Project Amount. IFMS removes costs until the total of costs plus burden is equal to the Maximum Project Amount. Costs are removed in the following order:

- **#** Commitments
- # Obligations (with associated burden)
- # Project Charges (with associated burden)
- # Expenditures (with associated burden)

All excess costs are placed in a Distribution Default FPCA entry if one exists. Otherwise, the Budget Fiscal Year Project/Customer/Agreement Excess Table (FPCX) is updated with the removed costs.

After costs are distributed to the Budget Fiscal Year Project/Customer/Agreement Table (FPCA) entries, IFMS checks that the distributed costs and burden amounts do not exceed the maximum funding amount specified in the Customer Agreement Line Table (CALT). IFMS removes excess costs in this order:

- # Commitments
- # Obligations (with associated burden
- # Project charges (with associated burden)
- # Expenditures (with associated burden)

Costs are removed according to the relative amount of the cost component that the FPCA table is responsible for. For each cost component:

FPCA Excess =

Customer Agreement (FPCA Cost + Burden/ Customer Agreement Cost + Burden)

As IFMS reduces costs, the ratio of costs to burden is maintained within the FPCA table:

FPCA Excess Cost = FPCA Excess/1 + Burden Rate

Resulting in:

New FPCA Cost = FPCA Cost - FPCA Excess Cost New FPCA Burden = (New FPCA Cost)(Burden Rate)

When costs and burden are removed from an FPCA entry, the following events occur:

The Budget Fiscal Year Project/Customer/Agreement Excess Table (FPCX) is updated with the removed costs.

The removed costs are distributed to the Distribution Default FPCA entry. When costs are transferred to the Default FPCA entry, the burden for these costs are recalculated using the burden rate in the Distribution Default FPCA entry.

If a Default FPCA distribution is not specified, IFMS will not distribute the excess project costs.

Step 4: Posting Amounts for Customer Agreements and Projects

The Project-to-Customer Distribution process distributes all costs retroactively, that is, the process redistributes costs each time that you run the process. However, the process posts incremental costs to journals and tables. Thus, when costs are posted, IFMS must compare the tables that were produced by the most recent Project-to-Customer Distribution process to the existing tables. The incremental difference between the most recent tables and the

Chapter 1 Page 34 9/00

existing tables are posted to the journals and the Project Cost Accounting tables.

Transferring Indirect Costs

In certain cases, you may want to charge a customer or project for indirect costs, usually overhead, that occurred in another project or accounting distribution. The Indirect Cost Transfer process distributes these indirect costs to the appropriate customer or project. This process is run independently of the Project-to-Customer Distribution process.

When you run the Indirect Cost Transfer process, IFMS selects each Budget Fiscal Year Project/Customer/ Agreement Table (FPCA) entry that contains an Indirect Cost Transfer option other than **N**. Then, for each of these table entries, IFMS creates an Internal Voucher Transaction (IV) to transfer the costs into the correct accounting distribution. IFMS places the IV transactions into the Document Suspense File (SUSF) for future processing.

When the IV transactions are processed, the transactions will generate an expenditure for the FPCA entry and a negative expenditure for the indirect cost accounting distribution specified in the FPCA entry, the Project Options Table (PRJO), and the Project Options - Fund Table (PFND).

In addition, the IV transactions will move the indirect costs into the FPCA entry Obligation Adjustments In and Expenditure Adjustments In fields so that these costs are easily identified and do not affect the Project-to-Customer Distribution process.

Billing Customers

After costs are distributed to customers, you can bill the customers for the costs by running the Automatic Bill Generation program. By using billing information specified in the Customer Agreement Document (RA), the Automatic Bill Generation program creates the following unprocessed documents:

- # Billing Documents (BDs) to bill customers.
- # Standard Voucher Documents (SVs) to apply customer advances.

- # Cash Receipt Documents (CRs) to bill other federal agencies.
- # Internal Voucher Documents (IVs) to bill customers who also use IFMS.

Before the Automatic Bill Generation program creates any bills, the program checks the total available agreement amount to verify that a bill is never generated that will exceed the total actual agreement amount. The billing amount is calculated using information from the Customer Agreement Line Table (CALT) as follows:

Billing Amount =

Expenditures + Project Charges + Burden Amount - Receivables - Collections - Advances Used

The Automatic Bill Generation program creates a document line for each related Budget Fiscal Year Project/Customer/Agreement Table (FPCA) entry according to this calculation:

Line Amount = Expenditures + Project Charges + Burden Amount - Adjustments - Billings

If the Internal Billing Option is **S**, the Automatic Bill Generation program creates a document line for each related Budget Fiscal Year Project/Customer/Agreement Detail Table (FPCD) entry according to the same calculation above.

After the Automatic Bill Generation program creates billing transactions, the program places these transactions in the Document Suspense File (SUSF) for future processing.

Recording Cash Advances

After projects are linked to customers in the Budget Fiscal Year Project/Customer/Agreement Table (FPCA), you can enter Cash Receipt Documents (CRs) to record advances for customer agreements that are funding a project through advances.

Chapter 1 Page 36 9/00

See the Accounts Receivable Subsystem section of the *IFMS User's Guide* for more information on how to enter CR transactions.

Clearing Customer Agreement Lines

Because customer agreement clearing is based on budget fiscal years, IFMS performs the customer agreement clearing process at the customer agreement line level. You can purge customer agreement lines from the Project Cost Accounting subsystem by either identifying a specific line to be cleared in the parameter card, or by setting the status indicator for a line to purge in the Customer Agreement Line Table (CALT).

For each selected customer agreement line to be eligible for clearing, the line must meet the following conditions:

- # If the line is for a reimbursable agreement, the sum of the Expenditures, Project Charges, and Burden Amounts must equal the sum of the Advanced Used and Collections amounts.
- # The Commitment, Obligation, and Obligation Burden amounts must equal zero.
- # The Advance Amount must equal the Advance Used Amount.
- # No expenditure adjustment transactions referencing the line can remain open in the Voucher Line Table (PVLT).
- # If the line is for an internal agreement, the Maximum Amount in the Customer Accounting Distribution Table (CADT) must equal the CADT Distributed Amount in the Customer Agreement Header Table (CAHT).

Once lines are cleared, the customer agreement clearing process generates reports that list the cleared customer agreement lines and the cleared Budget Fiscal Year Project/Customer/Agreement Table (FPCA) entries.

For more information on the customer agreement clearing process, see the IFMS Operations Guide.

Clearing Projects

Projects can be cleared at the project, subproject, and budget fiscal year project levels. To clear projects, subprojects, and budget fiscal year projects, specify the projects to be cleared in a parameter card, or by setting the Status Indicator of **P** (Purge) in the Project Table (PROJ), Subproject Table (SPRJ), and Budget Fiscal Year Project Table (FPRJ) entries.

? Note

If the Status Indicator for the project is set to purge, IFMS assumes that the related subproject and BFY projects are also set to purge.

For projects to be cleared, the project must meet the following conditions:

- # The Commitment and Obligation amounts must be zero for the individual subprojects and the project.
- # The subprojects and budget fiscal year projects may not be referenced by an open transaction including requisitions, obligations, receivers, payment documents, and receivable transactions.
- # If the FPRJ Spending Control Indicator is not I, the related FPRJ entries must have Commitment and Obligation amounts of zero.
- # If the FPRJ Spending Control Indicator is not I, the related FPRJ entries must have undistributed amounts of zero.

After IFMS clears projects, the clearing process produces reports that list all cleared projects, subprojects, Budget Fiscal Year Project Table (FPRJ) entries, and Budget Fiscal Year Project/Customer/Agreement Table (FPCA) entries. The process also updates project clearing tables.

For more information on the project clearing process, see the IFMS Operations Guide. For more information on the project clearing tables, see the Project Cost Accounting inquiry tables.

Chapter 1 Page 38 9/00

Summary

The Project Cost Accounting subsystem tracks project costs, associates project costs with customer agreements, and distributes the project costs to customers.

A project is an entity that collects costs for items or services that your agency provides to customers. Projects are divided into subprojects which collect spending information about the costs collected for a project. IFMS collects this spending information when you reference a subproject in spending documents, or when you enter a Project Charge Document (CH). These costs are then "rolled up" to the project. You establish projects and subprojects in the Project Table (PROJ) and the Subproject Table (SPRJ).

A customer is any vendor, office within your agency, or other agency that provides funding for a project. The amount of funding that a customer agrees to provide for a project is established by entering Customer Agreement Estimate Setup Documents (ERs) and Customer Agreement Setup Documents (RAs). Customers can provide funding through direct appropriations, advances, or by reimbursing your agency for expenses incurred.

To associate projects to customer agreements, you enter information about the project, the customer agreement, and the funding for the project in the Budget Fiscal Year Project/Customer/Agreement Table (FPCA).

Once projects are associated with customers, you can collect project costs by entering spending transactions, distribute project costs to customers by running the Project-to-Customer Distribution process, transfer indirect costs by running the Indirect Cost Transfer process, and bill customers by running the Automatic Bill Generation program.